

WHAT IS CLAIMED IS:

1. A steam supplying apparatus in a washing machine comprising:

5 a tank connected to a water supply unit adapted to supply wash water, the tank being connected at a top portion thereof with a wash tub via a steam supply line;

a heater arranged in the tank, and adapted to heat wash water supplied into the tank, thereby generating steam to be  
10 supplied into the wash tub; and

water level limiting means arranged in the form of an air-compressible space in the tank above a predetermined water level limit of the tank, the water level limiting means draining, into the steam supply line, an amount of water  
15 exceeding the predetermined water level limit after a water level of the tank reaches the predetermined water level limit, using an air pressure generated in the water level limiting means.

20 2. The steam supplying apparatus according to claim 1, wherein the water level limiting means comprises:

an air chamber defined in the tank above the predetermined water level limit of the tank, the air chamber being reduced in volume in accordance with an increase in the  
25 water level of the tank, thereby causing air existing in the

air chamber to be compressed; and

an extension passage connected, at one end thereof, to the steam supply line while extending into the tank such that the other end thereof is arranged at the water level limit of the tank, the extension passage allowing the excessive amount of water to be drained from the tank therethrough, along with the steam generated in the tank.

3. The steam supplying apparatus according to claim 2, wherein the water supply line connecting the water supply unit and the tank extends, at an end thereof, into the tank through the top portion of the tank while passing through the air chamber such that the end thereof is arranged at the predetermined water level limit of the tank.

4. The steam supplying apparatus according to claim 2, further comprising:

a mesh installed in the tank such that the mesh comes into contact with a surface of the water in the tank when the water level of the tank reaches the predetermined water level limit.

5. The steam supplying apparatus according to claim 4, wherein the mesh extends from the predetermined water level limit of the tank to an inner top surface of the tank.

6. The steam supplying apparatus according to claim 4,  
wherein the mesh is provided with a steam hole connected to the  
steam supply line, the steam hole being provided at a central  
portion of a selected one of cell groups each consisting of  
four adjacent ones of cells defined in the mesh.

7. The steam supplying apparatus according to claim 6,  
wherein the steam hole of the mesh extends from the  
predetermined water level of the tank to an inner top surface  
of the tank to form the extension passage.

8. The steam supplying apparatus according to claim 4,  
wherein the mesh is provided with a water hole connected to the  
water supply line, the water hole being provided at a central  
portion of a selected one of cell groups each consisting of  
four adjacent ones of cells defined in the mesh.

9. The steam supplying apparatus according to claim 1,  
wherein the steam supply line has a nozzle structure at an end  
thereof connected to the wash tub.

10. A steam supplying apparatus in a washing machine  
comprising:

a tank connected to a water supply unit adapted to supply

wash water, the tank being connected at a top portion thereof with a wash tub via a steam supply line;

a heater arranged in the tank, and adapted to heat wash water supplied into the tank, thereby generating steam to be supplied into the wash tub;

water level limiting means arranged in the form of an air-compressible space in the tank above a predetermined water level limit of the tank, the water level limiting means draining, into the steam supply line, an amount of water exceeding the predetermined water level limit after a water level of the tank reaches the predetermined water level limit, using an air pressure generated in the water level limiting means; and

a mesh installed in the tank such that the mesh comes into contact with a surface of the water in the tank when the water level of the tank reaches the predetermined water level limit.

11. The steam supplying apparatus according to claim 10, wherein the mesh extends from the predetermined water level limit of the tank to an inner top surface of the tank.

12. The steam supplying apparatus according to claim 11, wherein the mesh is provided with a steam hole connected to the steam supply line, the steam hole being provided at a central

portion of a selected one of cell groups each consisting of four adjacent ones of cells defined in the mesh.

13. The steam supplying apparatus according to claim 12,  
5 wherein the steam hole of the mesh extends from the predetermined water level of the tank to the inner top surface of the tank to form an extension passage connected, at one end thereof, to the steam supply line while extending into the tank such that the other end thereof is arranged at the water level  
10 limit of the tank, the extension passage allowing the excessive amount of water to be drained from the tank therethrough, along with the steam generated in the tank.

14. The steam supplying apparatus according to claim 11,  
15 wherein the mesh is provided with a water hole connected to the water supply line, the water hole being provided at a central portion of a selected one of cell groups each consisting of four adjacent ones of cells defined in the mesh.

20 15. The steam supplying apparatus according to claim 10, wherein the water level limiting means comprises:

an air chamber defined in the tank above the predetermined water level limit of the tank, the air chamber being reduced in volume in accordance with an increase in the  
25 water level of the tank, thereby causing air existing in the

air chamber to be compressed; and

an extension passage extending between the steam supply line and the water level limit of the tank, the extension passage allowing the excessive amount of water to be drained from the tank therethrough, along with the steam generated in the tank.

16. The steam supplying apparatus according to claim 10, wherein the water supply line connected the water supply unit and the tank extends, at an end thereof, into the tank through the top portion of the tank such that the end thereof is arranged at the predetermined water level limit of the tank.

17. A steam supplying apparatus in a washing machine comprising:

a tank;

a water supply line extending, at one end thereof, into the tank through a top portion of the tank such that the one end thereof is arranged at the predetermined water level limit of the tank, the water supply line being connected, at the other end thereof, to a water supply unit adapted to supply wash water;

a steam supply line connected between the top portion of the tank and a wash tub;

a heater arranged in the tank, and adapted to heat wash

water supplied into the tank, thereby generating steam to be supplied into the wash tub;

an air chamber defined in the tank above the predetermined water level limit of the tank, the air chamber being reduced in volume in accordance with an increase in the water level of the tank, thereby causing air existing in the air chamber to be compressed;

an extension passage extending between the steam supply line and the water level limit of the tank, the extension passage allowing the excessive amount of water to be drained from the tank therethrough, along with the steam generated in the tank; and

a mesh installed in the tank such that the mesh comes into contact with a surface of the water in the tank when the water level of the tank reaches the predetermined water level limit.

18. The steam supplying apparatus according to claim 17, wherein the mesh is provided with a steam hole connected to the steam supply line, the steam hole being provided at a central portion of a selected one of cell groups each consisting of four adjacent ones of cells defined in the mesh.

19. The steam supplying apparatus according to claim 18, wherein the steam hole of the mesh extends from the

predetermined water level of the tank to the inner top surface of the tank to form the extension passage.

20. The steam supplying apparatus according to claim 17,  
5 wherein the mesh is provided with a water hole connected to the water supply line, the water hole being provided at a central portion of a selected one of cell groups each consisting of four adjacent ones of cells defined in the mesh.

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